FEBRILE INFANT PATHWAY

**8-28 Days**

**Exclusion**
- Gestational age ≤ 37 weeks
- Weight ≤ 2,000 grams
- Need for immediate critical care
- Chronic underlining illness or immunocompromised
- CVL catheter or VP shunt in place
- Post operative patient or hospitalized for 3 days or more

**Herpes Simplex Virus (HSV) Risk Factors**

Physical:
- Severe illness
- Hypothermia
- Seizures
- Depressed neuro status (not arousable)
- Vesicular rash
- Exposure or history of HSV lesions (genital or skin/oral prior to or after delivery)

Diagnostic:
- CSF with pleocytosis > 20, without clear bacterial infection (e.g. positive gram stain or positive MEP)
- Thrombocytopenia
- ALT >50

**Disclaimer:** If available, PCT should be obtained. If PCT unavailable, both ANC and CRP should be obtained; CRP >2mg/dL, and ANC >4000 are considered abnormal

**Obtain HSV workup:**
- HSV PCR from conjunctiva, buccal mucosa, rectum, and any vesicular lesions
- HSV blood PCR (can add to existing CBC specimen)
- CMP

**Start antimicrobials:**
- 8-21 days: Ampicillin + Ceftazidime
- 21 + days: Ceftriaxone
- Acyclovir (if HSV workup performed)*

Indications to expand antibiotic coverage:
- Recent maternal infection (e.g. UTI)
- Bulging fontanel

*Requires renal dosing

**Respiratory pathogen panel not routinely recommended, unless clinically indicated**

**Perform LP**
(CSF studies = cell count, glucose, protein, meningitis/encephalitis panel (MEP), gram stain and culture)

**Disclaimer:** Pathways are intended as a guide for practitioners and do not indicate an exclusive course of treatment nor serve as a standard of medical care. These pathways should be adapted by medical providers, when indicated, based on their professional judgement and taking into account individual patient and family circumstances.

ChildrensNebraska.org/Pathways

Updated 01/2022
Obtain history and assess for HSV risk using .febrileinfanthistory

Obtain
- UA with reflex to culture via catheter
- CBC with differential, blood culture
- Procalcitonin (PCT); or CRP if PCT unavailable
- SARS-COV-2 PCR (as pandemic is ongoing)

Respiratory pathogen panel not routinely recommended, unless clinically indicated

Febrile infant
Rectal temp ≥ 38°C (or reliable fever at home) OR Hypothermia with temp < 36°C

Sign of focal infection or shock?
If high suspicion of bronchiolitis continue pathway

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High Risk for IBI

Low Risk; No indication for admission
- No antimicrobials and assure close PCP follow-up within 24 hours

Low risk with normal UA; Meets admission criteria
- No antimicrobials if meets low risk criteria

Low risk with abnormal UA
- May consider LP Start Ceftriaxone; Non-menigitic dosing

Admit to Hospitalist

High Risk for IBI

- Perform LP: CSF studies (cell count, glucose, protein, meningitis/encephalitis panel (MEP), gram stain and culture)
- Start ceftriaxone (meningitic dosing)

If Risk for HSV or CSF with pleocytosis > 20 without clear bacterial infection add:
- HSV PCR from conjunctiva, buccal mucosa, rectum, and any vesiculr lesions
- HSV blood PCR (can add to existing CBC specimen)
- CMP
- Start Acyclovir

Discontinue antimicrobial(s) and may discharge hospitalized infant if all cultures are negative at 24-36 hours and HSV PCR (if sent) is negative

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ChildrensNebraska.org/Pathways Updated 01/2022
*Only applies to patients ≥ 37 weeks gestation at birth

Febrile Infant: Antibiotic Dosing 8-21 days

- Acyclovir: 20mg/kg IV every 8hr
- Ampicillin: 75mg/kg IV every 6hr
- CefTAZidime: 50mg/kg q8hr

These antibiotics require renal dosing

References:
1. Lexicomp Online, Pediatric and Neonatal Lexi-Drugs Online, Hudson, Ohio: UpToDate, Inc.; 2020; accessed: 8/26/2020

Febrile Infant: Antibiotic Dosing 22-60 days

- Acyclovir: 20mg/kg IV every 8hr
- CefTRIAXone: 50mg/kg IV every 12hr (CNS infection)
  50-75mg/kg IV every 24hr (non-CNS infection)

References:
1. Lexicomp Online, Pediatric and Neonatal Lexi-Drugs Online, Hudson, Ohio: UpToDate, Inc.; 2020; accessed: 8/26/2020
## Glossary

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABX</td>
<td>Antibiotics</td>
</tr>
<tr>
<td>ALT</td>
<td>Alanine transaminase</td>
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<tr>
<td>ANC</td>
<td>Absolute neutrophil count</td>
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<tr>
<td>CBC</td>
<td>Complete blood count</td>
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<tr>
<td>CMP</td>
<td>Comprehensive metabolic panel</td>
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<tr>
<td>CNS</td>
<td>Central nervous system</td>
</tr>
<tr>
<td>CRP</td>
<td>C-reactive protein test</td>
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<tr>
<td>CSF</td>
<td>Cerebrospinal fluid</td>
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<tr>
<td>CVL</td>
<td>Central venous line</td>
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<tr>
<td>CXR</td>
<td>Chest X-ray</td>
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<tr>
<td>HSV</td>
<td>Herpes simplex virus</td>
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<tr>
<td>IBI</td>
<td>Invasive bacterial infection</td>
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<tr>
<td>IM</td>
<td>Intramuscular</td>
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<tr>
<td>LP</td>
<td>Lumbar puncture</td>
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<tr>
<td>MEP</td>
<td>Meningitis/encephalitis panel</td>
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<tr>
<td>PCR</td>
<td>Polymerase chain reaction</td>
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<tr>
<td>SEM</td>
<td>Skin, eye, and mouth</td>
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<tr>
<td>PCT</td>
<td>Procalcitonin</td>
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<tr>
<td>UA</td>
<td>Urinalysis</td>
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<tr>
<td>VPS</td>
<td>Ventriculoperitoneal shunt</td>
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